CONFIDENTIAL
SECURITY INFORMATION

REPORT NO. [redacted]

50X1

COUNTRY Poland 50X1

DATE DISTR. 30 March 1954

SUBJECT The Warsaw Polytechnic Institute

NO. OF PAGES 8

DATE OF INFORMATION [redacted]

REFERENCES:

PLACE ACQUIRED [redacted]

50X1

THIS IS UNEVALUATED INFORMATION

SOURCE [redacted]

50X1

1. The Warsaw Polytechnic Institute (Politechnika Warszawska) was located in Warsaw in the block formed by Koszykowa Street, Noakowskiego Street, Nowowiejska Street, and Niepodleglosci Avenue. The Institute occupied an area of about 250 x 350 m. It consisted of several brick buildings, most of them old with tin roofs. [redacted] the general layout, and with details of a few buildings /See Annex A/. 50X1 50X1

2. The Institute was subordinate to the Ministry of Higher Education and Science. [redacted] the organizational changes which, since 1947, have been gradually introduced [redacted] The rector, the head of the institute, was assisted by pro-rectors and by an advisory body, the Polytechnic Senate (Senat politechniki). An administrative director was in charge of administration. The registrar (kwestura) kept all records of students. There were chairs for the following courses offered at the Institute in addition to others: civil engineering, mechanics, communications, architecture, factory construction, chemistry, mechanical engineering, electrical engineering, telecommunications, machine construction, aviation, surveying, and sanitary engineering. Each chair (katedra) had a separate director, several professors, and an auxiliary staff. In addition there were laboratories (zaklady), either one or several, and workshops attached to each chair. 50X1 50X1 50X1

3. [redacted] 50X1

At that time, there were about 6,000 students enrolled in the Institute at undergraduate and graduate levels. [redacted] the number of professors in the Institute [redacted] 50X1 50X1 50X1

CONFIDENTIAL

SECURITY INFORMATION

4. The salary for an assistant professor ranged between 600 to 1,200 zloty per month and that of a professor between 1,500 and 1,700 zloty per month. In order to be an assistant professor, one had to have completed the first three years of study and to be studying for a master's (magister) engineering degree, all of which required a total of 5 to 5½ years of study.

5. To qualify as a professor, it was necessary to obtain the degree of Candidate of Science which was granted after 7 to 7½ years of study, or two years more than that required for a master's engineering degree. After obtaining this degree, one could submit an application to the Ministry of Higher Education which would grant or refuse the title of professor to the applicant.

6. After obtaining the degree of Candidate of Science, a doctor's degree could be obtained by doing several years research work in addition to writing a thesis. Those doctors' degrees granted before 1952 had been abolished. Doctor's degrees granted prior to 1952 required the same length of time as that required for the Candidate of Science degree, or that required for a doctor's degree in West Germany.

7. The highest degree in Poland was that of member of the Polish Academy of Science (Polska Akademia Nauk). Members of this academy were known as Academicians. One was nominated for membership in the Academy in recognition of outstanding work in research or discovery. Nominations were proposed by members of the Academy themselves.

8. Professors worked 24 hours a week. This included a maximum of six hours spent in lecturing, and the remainder spent in classroom laboratories. The laboratory time could be spent on individual research or in working for industry. The professors were able to conduct their research without much government control. Money for research -- in limited quantities -- had to be obtained from the industries. It was possible for professors to negotiate contracts with industry for the purpose of carrying on some research project.

9. Living conditions were very bad for both students and faculty members. Each individual employed was allowed 10 sq. m. of living space. 50X1
50X1 allowed one bedroom, one living room, a kitchen, and bath. An 50X1
50X1 ordinary citizen would have been required to take in an additional roomer in this amount of space.

10. From January until April 1953, the Department of Telecommunications had 800 undergraduate students, five per cent of whom were girls. A very small per cent of this number were students from the Balkan states. The student's first year included such basic courses as mathematics, physics, mechanics, drawing, military training, etc. The second year consisted of specialized courses in his selected field. The third year was a continuation of the second. Six hours per week were spent in attending political lectures.

11. There were about 100 courses offered in the Department of Telecommunications. The department was broken down into sections such as the sections for transmitters (sekcja nadajniki), for receivers (sekcja odbiornikow), for telecommunications (sekcja lacznosci), for radio tube construction (sekcja budowy lamp), etc.

50X1

13. [redacted] the following laboratories located in the Physics building:

a. The electrical machines laboratory (laboratorium maszyn elektrycznych) was located in a room about 12 m. x 12 m. There were about 50 different electrical machines for both alternating and direct current. The machines were small and did not exceed 60 kw. There were also such measuring instruments as voltmeters, ammeters, powermeters, resistance bridges, oscilloscopes, electrical brakes, etc. The equipment was all very old and the number of measuring instruments inadequate. Two or three small rooms were used as workshops. There were several basic machine tools in the workshops.

b. The Chair of Electrical Machines (Katedra Maszyn Elektrycznych) was located in the second story of the Physics building. It was made up of two or three small rooms without equipment.

c. The Chair for Wired Radio with its laboratory (Katedra i Zakład Radiofonii) consisted of one room about 6 x 2.5 m.; one room about 6 x 6 m., and one room about 6 x 10 m. The equipment was insufficient here, but there were vacuum tube voltmeters, bridges, decade resistors, one distortion and noise meter, one audio-frequency generator, one impedance bridge, and two or three panel racks with built-in audio amplifiers. There was also a tape recorder made by Philips of Holland which had been donated by the Polish Radio. The staff included one professor and two assistants.

d. The Chair for Design and Production Methods of Telecommunications Equipment (Katedra i Zakład Technologii i Konstrukcyji Telekomunikacyjnych) with its laboratory shared the space occupied by the Chair for Wired Radio. This laboratory was in the first stages of organization. There was no equipment.

e. The Laboratory for Electro-Acoustics and the Laboratory for the Study of Vibration (Zakład Elektro-Akustyki i Zakład Zadania Drgan) occupied a space of about 120 sq. m. The equipment was limited to a few basic instruments. These laboratories were used by both the Warsaw Polytechnic Institute and the Polish Academy of Science.

In addition to the laboratories mentioned above, there are other laboratories located in the Physics buildings with which I am not familiar.

14. The following laboratories were located in the Electro-Technical building:

a. Laboratory for High Tension (Zakład Urzadzen Wysokiego Napiecia). This laboratory occupied one room about 12 m. high, 10 m. wide, and 15 m. long. The room contained a high tension pulse generator of about 2,000,000 volts. This generator was produced in Holland and brought to Poland after World War II. There was one professor and two assistants working in the laboratory.

b. Laboratory of Electrical Measuring (Zakład Miernictwa Elektrycznego).

c. Laboratory for the Fundamentals in Telecommunications (Zaklad Podstaw Telekomunikacyji).

d. Laboratory for Telecommunications Lines (Zaklad Teletransmisji).

e. Laboratory for the Building of Electrical Measuring Instruments (Zaklad Budowy Przyrzadow Elektrycznych).

f. Laboratory of Telecommunication Switchboards (Zaklad Techniki i Laczenia). This laboratory was equipped with old-type basic equipment in addition to one modern Swedish central switchboard for 2,000 numbers.

g. Laboratory for Electrical Grids and Power Stations (Zaklad Sieci i Elektrowni). There was no equipment in this laboratory.

Each of these laboratories, except the Laboratory for High Tension, occupied a space of about 100 by 150 sq. m. There were two to four assistants and one professor attached to each laboratory.

15. The Polytechnic Institute suffered greatly from a lack of space and was seriously overcrowded. In many instances, laboratories were located in corridors. The laboratory equipment was generally used equipment which had been donated by such state institutions as the Polish Radio, Polish Film, Wired Radio, and the Ministry of Posts and Telegraph. When it was possible, this Institute, as well as others in Poland, bought their own electronics, chemical, physical, thermal, mechanical, and electrical equipment from East Germany, Czechoslovakia, Hungary, US, England, Holland, or France.

16. The technical equipment in the Institute compared to that found in the West was very poor. However, this equipment compared to pre-World War II technical equipment was noticeably better. The difficulty in equipping these institutes did not lie in the lack of bank credits but in the inability to bring equipment through the Iron Curtain or to produce it in Poland.

17. A person interested in studying at the Polytechnic Institute was required to take a state examination to determine his qualifications. The examination was given at a nearby technical institute and the results forwarded to the Ministry of Higher Education which either accepted or rejected the application. The ministry, in some cases changed the specialized course of study chosen from one field of engineering to another, or contrary to the student's wishes, sent him to a polytechnic institute other than the one of his choice. There was no tuition fee, but the student was required to pay for his room and board.

18. In exchange for his education, the student relinquished a choice of employment after graduation. The Commission for Placing New Employees (Komisja Przydzialu Pracy) selected the place of employment such as the Polish Radio, Polish Film, Security Police (UB), etc., and there the student worked at the prevailing salary for three years.

19. Sons of peasants and laborers were given preference when seeking admission to the Polytechnic Institute or to any of the other institutions of learning. Children of landowners or professional groups had very little chance for admission. An acquaintance of mine asked to be transferred from a teaching position to a janitor's job so that his son, a brilliant lad, might gain admission to the Polytechnic Institute.

20. The atmosphere in the classroom was such that students and faculty very frequently said what they did not believe. This always led to a kind of inner tension and uncertainty. For example, professors had to state that products of Russian origin had no equal and should be taken for models, and that products of capitalistic countries were inferior and to be avoided, despite the fact that the Western model on hand might be obviously superior in many respects.

21. There was no direct control over the lectures of professors. One simply inserted certain stock political phrases as a matter of security. The Polytechnic Institute had one department called the Department of Marxism and Leninism, which not only gave compulsory courses to the students, but also offered weekly lectures for professors. Attendance by the professors was not, however, compulsory. This was a five-year course.

22. Relations between students and professors were not always pleasant. There was usually some friction and a professor often dreaded lecturing to his class. There were instances when students jeered professors from the classroom. This happened for a number of reasons. Ninety per cent of the students were members of the Polish Youth Union (Zwiazek Mlodziezy Polskiej -- ZMP) and they were taught, among other things, to disregard everything which was a part of the old system. Persons of an older generation were products of the old system and, for this reason, much that they said or believed or accomplished was to be viewed with a certain suspicion. 50X1 if one gave the students a minimum amount of theory and as much practical laboratory time as possible, the students were generally more satisfied. Students could report professors to the Communist Party for seeming to be anti-Russian.

23. Students became members of the ZMP by compulsion. The greater percentage of them were not sincere members. They became members in order to hide their true feelings and to be allowed to continue their education. Many of them were aware of the untruths fed them by the ZMP and only appeared to accept these statements about the "inferior and decadent capitalistic system". The result was that the student was in a position to freely criticize the old system or the members of it when it served his own advantage and, at the same time, to enjoy the privileges of being a ZMP member without believing in its principles.

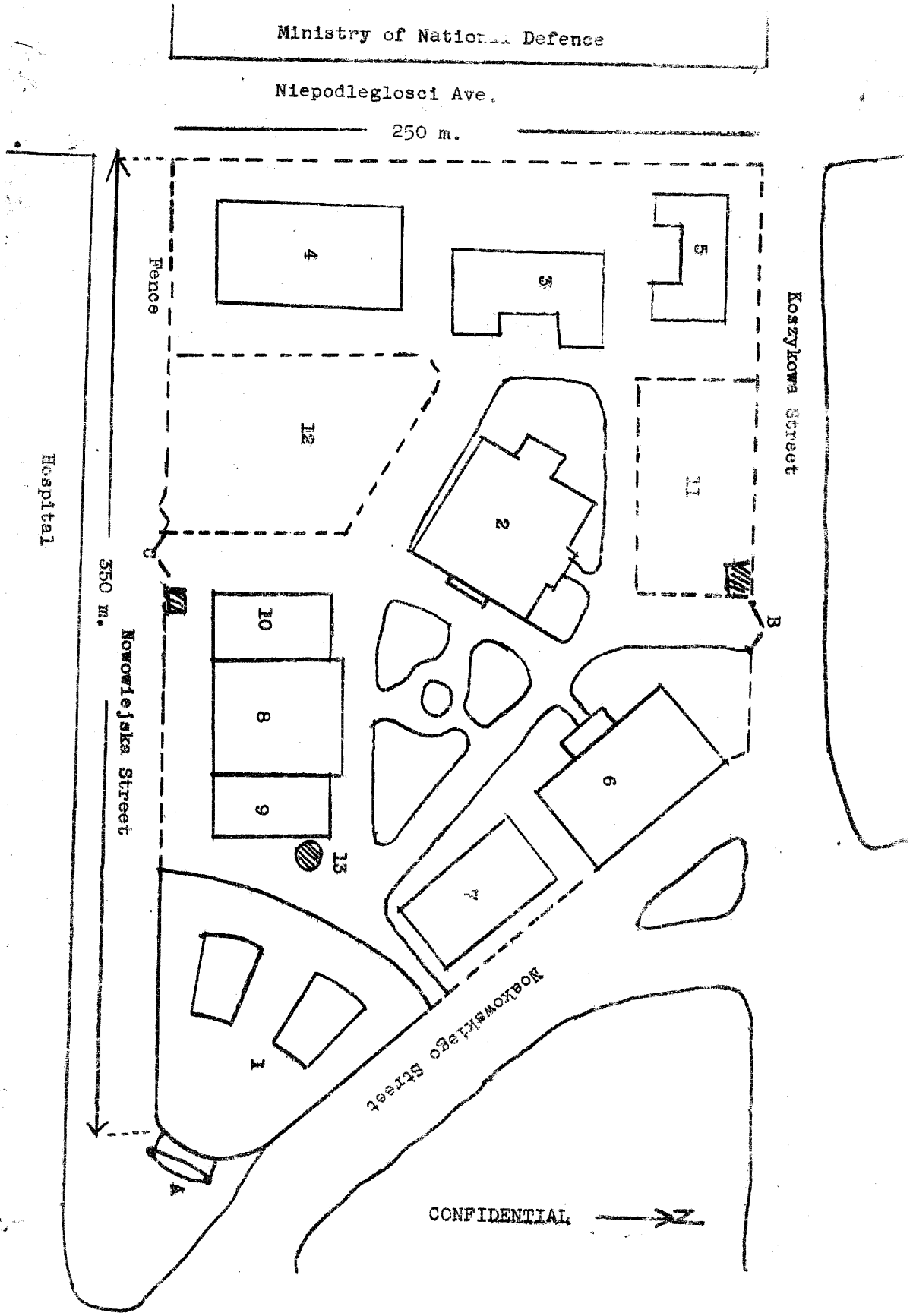
24. Standards of education have been higher in the last few years because universities were allowed to drop students for scholastic inaptitude. The feeling among the students that "everyone will pass" no longer prevails. The fact that there is too much political emphasis and not enough freedom of speech are the two most obvious weaknesses in the entire school system. Science, by comparison, is one of the freer fields in which to work in Poland, despite the great lack of materials, tools, and freedom of speech. It is relatively a free field because a highly energetic individual can usually work on the type of research project he wishes. For this reason many industrial engineers have returned to teaching in the universities. In industry they are responsible for production without the necessary materials and if the products are not forthcoming the engineer is replaced because of inefficiency. In a university their responsibilities are not so great as in industry. 50X1

Comment: For biographical sketches of some of the professors at the Institute, 50X1

50X1 Annex A. the Warsaw Polytechnic Institute

CONFIDENTIAL 50X1

50X1 Annex A, [redacted] the Warsaw Polytechnic Institute



50X1

50X1

Legend to Annex A - [redacted] the Warsaw Polytechnic Institute

A. Main Entrance

B. Side entrance on Koszykowa Street and also a driveway for vehicles.

C. Side entrance on Nowowiejska Street and also a driveway for vehicles.

1. Main building (gmach glowny), partly four and partly five stories high.

2. Physics building (gmach fizyki), three stories.

First floor - Laboratory for Electrical Machines, and workshops. (Laboratorium Maszyn Elektrycznych)

Second floor - Chair for Electrical Machines, and others.

Third floor - Chair for Wired Radio and laboratories (Katedra Radiofonii i Zaklad Radiofonii)
Department for Design and Production Methods of Telecommunications (Kadedra Technologii i Konstrukcji Telekomunikacyjnych i Zaklad)
Electro-Acoustic and Vibration Laboratory (Zaklad Elektroakustyki i Zaklad Badania Drgan Polskiej Akad[illegible]ii Nauk)
Medical-Electrical Instruments Research Laboratory (Zaklad Urzadzen Elektromedycznych)

Attic - Astronomical Observatory (Obserwatorium Astronomiczne)

3. Electro-technical building (gmach elektrotechniki), old, four-story building.

First floor - High Tension Laboratory (Zaklad Urzadzen Wysokiego Napiecia i Zaklad Podstaw Telekomunikacji)

Second floor - Telecommunications Laboratory (Zaklad Teletransmisji), Switchboards and Remote Control Laboratory (Zaklad Techniki Laczenia).

Third floor - Electrical Measuring Laboratory (Zaklad Miernictwa Elektryoznego); and another part of the Switchboard and Remote Control Laboratory.

Fourth floor - Power Station and Electric Power Transmission Lines Laboratory (Zaklad Elektrowni i Zaklad Sieci Elektrycznych).

4. Aerodynamics building (gmach aerodynamiki), old, three or four-story building.

5. Chemistry building (gmach chemii), new, three or four-story building.

6. Building for Designing (kreslarnia), old, three-story building.

7. Chemistry building (gmach chemii), under reconstruction.

8. Thermodynamics laboratory (laboratorium cieplne), old, three-story building.

50X1

Legend to Annex A (Cont'd)

9. Thermodynamics hall (laboratorium cieplne), old building.
10. Thermodynamics hall (laboratorium cieplne), burned building.
11. Area with apartment houses for professors. Details unknown.
12. Area with apartment houses for professors. Details unknown.
13. Smokestack, belonging to the Thermodynamics Laboratory.